ABSTRACT

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[Subject] To provide a brazing method which provides a braze joint excellent in corrosion resistance and a brazed structure excellent in the corrosion resistance of a braze joint.

[Approach to the subject] The inventive method comprises: assembling a first member (1) to be jointed and a second member (2) to be jointed into a temporary assembly, the first member (1) including a base plate (12) of a ferrous material and a diffusion suppressing layer (13) laminated on the base plate (12) and composed of a Ni-Cr alloy essentially comprising not smaller than 15% and not greater than 40% of Cr, the second member (2) being disposed on the diffusion suppressing layer (13) of the first member (1) with intervention of a brazing material (14) of a Cu-Ni alloy essentially comprising not smaller than 10% and not greater than 20% of Ni; and maintaining the temporary assembly at a temperature of not lower than 1200°C to fuse the brazing material (14) and diffuse Ni atoms and Cr atoms into the fused brazing material from the diffusion suppressing layer (13) to form the braze joint (6), causing the resulting brazing material of the braze joint (6) to have an increased melting point by increase of the Ni and Cr contents of the braze joint to self-solidify the braze joint (6), and then cooling the resulting assembly.

[Selected drawing] Fig. 2